Willing and Able

The Problem of Skills Shortages in Western Canada

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BUILDING THE NEW WEST

Willing and Able is the first of a series of reports of the *Filling the Gaps Initiative*, a one-year research and public education initiative that explores how governments are trying to influence the skills training outcomes of western Canada's post-secondary system, and identifies ways in which governments could improve their skills training policies. *Filling the Gaps* is a component of the Canada West Foundation's ***Building the New West (BNW) Project,*** a multi-year research and public consultation initiative focused on the strategic positioning of western Canada within the global economy. Five key priorities emerged from an extensive research and consultation process, and provide a framework for the ***Building the New West Project:***

- The West must create the tools to attract, retain, and build *human capital*;
- The West must continue *economic diversification*;
- The West must strengthen its *transportation infrastructure*;
- The West must promote the global competitiveness of its *major cities*; and
- The West must develop new ways of facilitating *regional coordination*.

Filling the Gaps is one of three ***BNW*** human capital initiatives. In 2003, the Canada West Foundation conducted the *Aboriginal Human Capital Strategies Initiative*, a one-year initiative focused on improving the education and labour market outcomes of Aboriginal people. Currently, the Canada West Foundation is conducting the *Immigration and Western Canada Initiative*, a one-year initiative designed to explore the role of immigration in meeting western Canada's future human capital needs. To learn more about the ***Building the New West Project,*** please visit the Canada West Foundation website (www.cwf.ca).

Ongoing advice for the *Filling the Gaps Initiative* is provided by an advisory committee consisting of Ron Bernard (Standard Aero), Katy Bindon (Okanagan University College), Neil Bouwer (Learning Policy Secretariat, Human Resources and Skills Development Canada), Jim Edwards (Board of Governors, University of Alberta), Mobinul Huq (Department of Economics, University of Saskatchewan), George Ivany (CWF Board Member), Ray Jeffery (Finning Canada), Roslyn Kunin (Roslyn Kunin and Associates Inc.), Wayne McElree (Saskatchewan Learning), Betty Notar (BC Advanced Education), Elaine Phillips (Manitoba Advanced Education), Greg Rudolf (Alberta Learning), Saj Shapiro (Canadian Association of Oilwell Drilling Contractors), Sam Shaw (NAIT), Paddy Smith (Department of Political Science, Simon Fraser University), and Anne Tingle (CWF Board Member). The views expressed in this document are not necessarily held in full or in part by the advisory committee members or the organizations they represent.

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With an aging demographic that celebrates early retirement, a culture of young people gravitating towards careers in information and communications technology, an outflow of residents from rural and remote areas, and staunch global competition for the best and brightest, it is no wonder that skilled labour shortages are becoming an ominous presence on the policy horizon. And with labour intensive projects like the 2010 Winter Olympics coming to BC, significant investment planned for Alberta's oils sands, the development of two uranium mines in northern Saskatchewan, and Manitoba Hydro's Wuskwatim dam project there is likely to be no new wiggle room in the western labour market over the coming years.

But with nearly 330,000 westerners looking for work and thousands more under-employed, working part-time or in jobs that are unchallenging and low-paying, why are some companies having difficulties finding workers? The problem, simply stated, is not a shortage of people, but a shortage of *skilled* people. Companies are looking not just for the willing, but also the able.

Understanding the inter-regional challenges of the labour market and the connectivity between the sectors and regions of the country is absolutely critical if labour supply strategies in the West are to be successful. *Willing and Able: The Problem of Skills Shortages in Western Canada* focuses on the impact of skills shortages on the western economy as a whole by assessing recent economic developments in the West and analyzing survey data, government publications and industry reports on skills shortages in Canada.

In general, there is mounting evidence to suggest a growing problem with skills shortages in certain sectors and certain regions of western Canada. Questionnaire responses from 76 industry associations across the West present a snapshot of the regional skills gap: 62 associations have indicated that skills shortages exist in the current labour market, and 73 associations expect shortages to exist over the next five years. These shortages are the most acute in the health care and the skilled trades occupations (especially in rural and remote areas). This is supported by the unemployment rates for these specific industries, as well as by the findings of several government and industry reports.

Provincially, labour markets are particularly tight in Saskatchewan and Manitoba – not because of robust economic growth, but rather due largely to high rates of labour out-migration among young, skilled workers. In Alberta and BC, skilled labour is scarce for other reasons: the Alberta energy sector will continue to draw upon the skilled labour pool over the coming years, and the 2010 Winter Olympics in BC have been forecasted to create as many as 132,000 local jobs between 2003 and 2015.

But with such tight labour markets in the West, individuals seeking employment may still face a number of challenges. Factors such as a mismatch of skills, insufficient experience, inability/unwillingness to migrate to high opportunity areas or a lack of information about employment opportunities and/or training programs may all prevent job seekers from obtaining employment.

Furthermore, the problem of skills shortages seems to be intimately tied to the state of post-secondary education in the West. Both the industry association responses and the literature findings indicate that although post-secondary training programs exist for many of the occupations experiencing shortages, a variety of deficiencies exist at the post-secondary level. These deficiencies include too few educational placements for students; a lack of adequate training equipment/financial resources at post-secondary institutions; differential provincial recognition standards; and the quality of the education received being insufficient for employment in the industry.

Western Canadians, in general, also feel that the post-secondary education system requires improvement – nearly 59% of westerners place a high priority on improving the post-secondary education system in the West, and only 24% feel that post-secondary graduates are well-prepared for the job market.

Effective regional labour strategies must, therefore, be implemented to avert a serious labour crunch over the coming decade. Many initiatives are already underway by various levels of government and industry to understand the linkages between training and employment. But, to ensure that the willing are in fact the able, much more needs to be done in coordinating the private sector, the governments that largely oversee post-secondary education, and the partnerships between the two in training and hiring workers.

INTRODUCTION

Western Canada's economic performance continues to be bolstered by strong commodity prices, low interest rates, and a strengthening US economy. Real GDP growth in the West is expected to be near 3% in 2004 – above the national rate of 2% (Scotia Economics, April 8, 2004). Western companies are seeing opportunities to expand operations and needing more workers to do it. In fact, many sectors of the economy are finding that the greatest constraint on their expansion plans is finding the workers they need.

Yet paradoxically, unemployment remains a problem for thousands of western Canadians. Nearly 330,000 westerners are looking for work and thousands more are underemployed, working part-time or in jobs that are unchallenging and low-paying. Many have given up and dropped out of the labour force altogether.

Where is the mismatch? Why – with 330,000 unemployed – are some companies having difficulties finding workers? Are the labourer's skills outdated? What skills are currently in demand? And how can workers obtain the skills that are needed to find work?

These are imposing questions that confront policymakers in their attempts to grease the wheels of the labour market and tap into western Canada's vast amount of unemployed human capital. The issue is a huge concern for both business and governments. Barring any technological advances, businesses that face a chronic shortage of labour will do one of two things – stagnate, or pack up and leave. Neither of these outcomes contributes to a strong, growing economy. Labour shortages will also reduce western Canada's global competitiveness as capital investors will not invest where trained workers are scarce.

Simply stated, the problem is not a shortage of people, but a shortage of *skilled* people. Companies are looking not just for the willing, but also the able.

There have been several reports on the shortages of skilled workers in Canada and the potential problems these shortages pose. Most of these examine a sector or region/province in isolation. It is critical to understand the inter-regional challenges created by these labour market issues and to emphasize the connectivity between the sectors and regions of the country. It is only by doing this first that we can understand the issues at the national level.

The *Human Capital Initiative*, part of Canada West Foundation's ***Building the New West Project,*** seeks to find solutions for tapping into the vast resources of western Canada's labour market. One segment of the *Human Capital Initiative* is the *Filling the Gaps* project, of which *Willing and Able: The Problem of Skills Shortages in Western Canada* is the first in a series of reports. This report will:

- Describe recent economic developments in western Canada and how they have affected labour markets;
- Identify the industries for which current and projected labour shortages are most severe in western Canada; and
- Discuss why labour shortages happen and how they impede economic growth.

The goal of the *Willing and Able* report – and the *Filling the Gaps* project – is to draw attention to the problem of insufficient skills in the labour market. This is not the first report to have done this, but *Willing and Able* is perhaps the first report to approach the problem of skills shortages from a uniquely western Canadian perspective – considering shortages in all four western provinces and understanding that labour market problems in one province have distinct impacts on labour markets in others.

THE PROBLEM OF SKILLS SHORTAGES

The traditional building blocks of production – land, capital and labour – are the fuel with which entrepreneurial energy generates wealth. And while not all of these will be required in the same quantity for the production of all goods and services, at least some basic labour is required, even if it is the one sole proprietor of a business.

Labour is perhaps the most important factor from a societal sense because people's livelihoods and personal financial stability are involved. The loss of a job has much more emotional and sociological impact than the closing of a plant (e.g., loss of capital) or the sale of real estate (e.g., loss of land). Labour is an important point at which human lives interface with the economy.

It is for this reason that labour markets and their functioning are of particular concern. But labour markets are complex mechanisms. It is often the under utilization of the labour force – in the form of unemployment – that grabs headlines and government attention. But labour markets can malfunction in the opposite way as well, taking the form of skilled labour shortages.

ECONOMIC DEVELOPMENTS AND LABOUR MARKETS IN THE WEST

Western Canada's economy has remained fairly strong over the past several years, but growth has often been uneven across provinces and sectors. Robust growth in certain sectors has been matched by severe downturns in other sectors. These ups and downs have affected demand for skilled labour in western Canada, as shortages or surpluses spill across provincial boundaries and across industries.

The enormous capital investment in Alberta's oil sands is an example of how labour demand in one sector can have a ripple effect across industries and provinces. Between 2000 and 2003, there was been an estimated $22.3 billion worth of capital spending in Alberta's oil sands (Canadian Association of Petroleum Producers 2003) – greater than the total annual GDP of New Brunswick.

Construction activity associated with the oil sands projects created a shortage of skilled construction workers, engineers, welders, plumbers, pipe fitters, and electricians. Wages for these skilled tradespeople have escalated tremendously, to the point of throwing the feasibility of some construction projects into jeopardy. For example, the costs associated with Syncrude Canada's latest expansion are estimated at $2.1 billion over budget, one-third more than expected and over 90% above original estimates. Much of this budget overrun has been driven by soaring labour costs. Even worse, Syncrude's expansion is expected to tie up about 5,000 workers for a year longer than first anticipated. This has had an immediate and tangible impact on other energy companies' stock, as the higher labour costs spill from one company to the next (Calgary Herald, March 6, 2004).

The impact of this high demand for skilled tradespeople is not limited to the oil sands sector. Other sectors such as housing construction and transportation have also felt the impact of rising wages necessary to compete for labour.

The industry ripple can work in the opposite direction as well, demonstrated by the recent slump in the forestry sector. Trades in the sawmills and transportation sector (i.e., logging truck drivers) have been in excess supply over the recent past, as the Canadian forestry sector contracts and rationalizes many of its operations. This excess supply of skilled tradespeople has, to some extent, driven down wages not only in the forestry but also in other sectors, especially in British Columbia.

Although it now appears that it may finally have turned a corner, the information technology sector in western Canada has also been through several years of excess supplies of skilled labour. Technicians, software developers, programmers, and technical support personnel found it difficult to find good positions in the post-tech bubble meltdown of the early 2000s. This was a generalized labour market condition across North America that is being brought into balance with the gradual recovery in IT.

Coming events that are certain to tighten labour markets include the construction activity leading up to the 2010 Winter Olympics in Vancouver/Whistler. Organizers have approximately six years to complete the facilities for the Games, which will involve construction of venues, the Vancouver Convention Centre, the rapid transit line (RAV), and the expansion of the Sea to Sky highway to Whistler. In fact, the 2010 Winter Olympics in BC have been forecasted to create as many as 132,000 local jobs between 2003 and 2015 (The 2010 Human Resources Planning Committee 2003). This will put added pressure on many of the construction trades and heavy-duty machinery operators – skills that will already be in short supply with the continued construction in Alberta's oil sands.

The government of British Columbia is the primary financial underwriter for the 2010 Games. There are serious taxpayer implications if construction projects run over budget or beyond timelines due to possible shortages of skilled labour.

Another major development in the coming years is the potential construction of a natural gas pipeline through the Mackenzie Valley in the Northwest Territories. Recent comments by the Premier of the NWT suggest that the tightness of available skilled labour could pose some problems or delays in the construction of the pipeline (Calgary Herald, March 9, 2004).

In Saskatchewan, proposed plans for a newsprint plant near Prince Albert, an expansion to a heavy oil upgrader at Lloydminster, and two uranium mines in the north may add another $2 billion in construction activity.

As well, Manitoba Hydro's Wuskwatim dam, a $900 million proposed project on the Burntwood River near Thompson, is the first new dam in Manitoba in more than a decade. The project is expected to employ hundreds of people during the construction phases, which would run until start-up expected in 2010.

Olympic construction, northern pipeline development, continued investments in the oil sands, and construction of hydro dams will all put tremendous pressure on skilled labour in western Canada over the next five to ten years—and that is just for the skilled trades working on these "mega projects." Of course regional economic development entails far more than just the mega projects – the possible labour shortages associated with these projects are only the most obvious manifestations of the problems. The shortages of skilled workers will also spill over into other regions and smaller industries within western Canada.

The consequences of prolonged labour shortages are obvious: companies will not be able to increase their production. As a result, the ability of the economy to generate wealth will stall. New technological advances can to some degree be used as a substitute for labour, and these advances have greatly contributed to rising productivity. As well, companies can also shift labour resources to other regions or countries, and with the advances in communications, even customer service jobs and analytical positions are being filled overseas.

Yet there are many instances in which qualified, in person, skilled labour is needed by a company in order to increase its production. With a lack of a skilled labour force, or with wages that have escalated well beyond original project budgets, many of western Canada's economic activities could be in jeopardy.

WHERE ARE THE SKILLS GAPS?

Anecdotal evidence suggests that there is indeed a shortage of skilled labour in the West. Media reports on a lack of appropriately trained workers in a variety of industries are common. But other than news stories and hearsay, what evidence of skills shortages exists? And for which industries are these shortages most acute?

In January 2004, the Canada West Foundation emailed a letter and questionnaire to 170 industry associations in western Canada. Industry associations from each of the western provinces and from each of the major industrial sectors were contacted. Concentration was placed on those industries that are intensive employers of skilled labour.

The questionnaire consisted of seven questions relating to the availability of skilled labour as well as the ability of post-secondary education programs to meet these industry's specific labour requirements both now and in the future. Of the 170 questionnaires sent, 79 were returned – 76 with responses, two claiming insufficient information to respond, and one declining to participate (Figure 1).

FIGURE 1: Industries Responding to CWF Questionnaire
(By National Occupational Classification System and Province/Region)

	BC	AB	SK	MB	West	Canada	Total
Management	0	0	0	0	0	0	0
Business, Finance, Administration	1	1	1	1	0	0	4
Natural and Applied Sciences	2	1	1	1	0	0	5
Health	7	3	6	3	0	0	19
Social Science, Education, Gov't	1	0	0	1	0	0	2
Art, Culture, Sport	1	0	0	0	0	0	1
Sales and Services	2	1	2	1	0	0	6
Trades, Transport, Equipment Operators	4	6	4	3	0	0	17
Primary Industry	2	5	0	0	0	5	12
Processing, Manufacturing, Utilities	2	3	1	2	1	2	11
Total	22	20	15	12	1	7	76

SOURCE: Canada West Foundation 2004 Industry Association Questionnaire. One respondent in the Trades, Transport, and Equipment Operators category represented both Alberta and Saskatchewan, and is thus tabulated twice in this table. Because of this double counted association, the TOTAL column and row will actually sum to 77.

The 76 questionnaire respondents are classified into ten categories using the National Occupation Classification (NOC) system. This was done to give an indication of where shortages are apparent by occupation rather than simply by industrial category. (Note: no responses were received in the management occupations category)

It is important to note that these data do not constitute a scientific survey. Rather, they are simply the answers provided by the 76 respondents from a pool of preselected industry associations. These results are only intended to give a snapshot of what industry associations are saying about their current and future demand for skilled labour. They are based solely on the perceptions of the industry associations. In no way should they be interpreted as factual hiring data provided by employers.

In interpreting these results, it is also necessary to remember that these are the responses of industry associations, not companies. Industry associations, while representing company members, often play an advocacy role in identifying challenges within their industry. This may have flavoured the results somewhat; an industry association may be more likely than a company to emphasize the challenges facing the industry.

As well, it could be that labour shortages are of particular concern for the responding groups, but are not of concern for the non-responding groups. It is recognized that this response pattern may add a bias into the data towards skills shortages being a problem.

1. Current Labour Shortages

Industry associations were asked the following question about the current balance of skilled labour in their field:

"Thinking about skilled labour in your industry, how would you describe the current balance?"

Of the 76 industry associations responding to the CWF questionnaire, 62 indicate that they are currently experiencing some (40) to severe (22) labour shortages, and most anticipate that this situation will continue over the next twelve months (Figure 2). Conversely, only two respondents indicate that they are currently experiencing an over-abundance of labour, and 12 out of 76 report no shortages.

Health care occupations are reporting a particular skilled labour crunch: 16 out of 19 respondents from health care fields indicate that they perceive some to severe labour shortages. Specifically, these shortages are reported among nurses, doctors, pharmacists, laboratory technologists, veterinarians and surgeons.

Industry associations for the trades, transportation, and equipment operators areas are also suggesting their members are facing shortages of skilled labour: 14 out of 17 respondents in this category say there are shortages at present, most of which are occurring in key occupations such as automotive service and repair, trucking transportation and construction. Aviation is an exception in the transportation sector, reporting no current labour shortages.

Other occupations currently facing shortages include those in sales and service (e.g., hotel and hospitality sectors) and in primary industries such as oil and gas, agriculture and mining, although these are generally less severe. Unique to the oil and gas sector is the seasonal nature of employment. Demand for workers is high in the fall and winter months, but tapers off during the spring and summer. The oil and gas associations have indicated that this characteristic poses a very unique challenge to the industry when attracting skilled workers.

FIGURE 2: Indication of Current Labour Shortages
(January/February 2004)

	Severe Shortage	Some Shortage	No Shortage	Excess Supply	Total
Business, Finance, Administration	0	3	1	0	4
Natural and Applied Sciences	0	5	0	0	5
Health	8	8	3	0	19
Social Science, Education, Gov't	0	2	0	0	2
Art, Culture, Sport	0	0	1	0	1
Sales and Services	2	4	0	0	6
Trades, Transport, Equipment Operators	9	5	2	1	17
Primary Industry	3	4	4	1	12
Processing, Manufacturing, Utilities	0	9	1	0	10
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SOURCE: Canada West Foundation 2004 Industry Association Questionnaire.

Very few associations indicate that their industries have sufficient or an over supply of labour resources from which to draw. But the occupations that do report sufficient labour supplies include library technicians, air transportation professionals and chemical manufacturers. Given the industry's downturn, forestry associations indicate that labour supply is not a major concern. In fact, five of the six forestry related associations report that they are experiencing no shortage, or even an oversupply of workers.

The industry associations were also asked the following questions about the balance of skilled labour in the short-term, past and future months:

"Has this situation existed for the past 12 months?"
"Do you expect this situation to continue for the next 12 months?"

Seventy-three out of the 76 respondents indicate that the current situation has existed for the last 12 months, and 72 out of the 76 respondents anticipate that the situation will not change over the coming 12 months. This suggests that the labour demand situation has been relatively constant and will remain so in the short-term.

In Saskatchewan, proposed plans for a newsprint plant near Prince Albert, an expansion to a heavy oil upgrader at Lloydminster, and two uranium mines in the north may add another $2 billion in construction activity.

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The industry associations were also asked the following questions about the balance of skilled labour in the short-term, past and future months:

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2. Future Labour Shortages

Industry associations were then asked about their future balance of skilled labour expected in their field:

"Looking ahead to the period 2005-10, what do you anticipate for the balance of skilled workers in your industry?"

Anticipating future labour demand in the period 2005-10, the skills shortage situation becomes more acute. Of the 76 respondents, 73 indicate that they will be experiencing some (39) to severe (34) labour shortages; two predict no future shortage; and only one group forecasts an excess supply of labour over this period (Figure 3).

FIGURE 3: Expectations of Future Labour Market Shortages
(2005 to 2010)

	Severe Shortage	Some Shortage	No Shortage	Excess Supply	Grand Total
Business, Finance, Administration	1	3	0	0	4
Natural and Applied Sciences	1	4	0	0	5
Health	10	7	2	0	19
Social Science, Education, Gov't	0	2	0	0	2
Art, Culture, Sport	0	1	0	0	1
Sales and Services	4	2	0	0	6
Trades, Transport, Equipment Operators	8	9	0	0	17
Primary Industry	5	6	0	1	12
Processing, Manufacturing, Utilities	5	5	0	0	10
Total	34	39	2	1	76

SOURCE: Canada West Foundation 2004 Industry Association Questionnaire.

This is sharply different from the 14 associations that currently indicate no skills shortage or an excess supply (Figure 2). This suggests that, over the coming years, attracting and retaining skilled labour is expected to be increasingly difficult.

Thirty-four of the association respondents anticipate severe shortages between 2005-10. This is a sizable increase from the 22 industry associations that currently report severe shortages in skilled labour. Increased shortages in the future are reported in nearly all occupational categories: nurses, doctors, paramedics, hotel workers, financial professionals, insurance agents, auto repairers, truckers, foresters, food processors and manufacturers all anticipate greater labour shortages over the next five years.

The industry association respondents offer a variety of explanations accounting for the increased shortages, the most significant of which is related to demographics. Respondents note that shortages in the future are expected due to the sizable portion of the workforce retiring in the coming few years. Indeed, one respondent reports that individuals over 50 years old currently fill one-third of the management positions in their industry, and that these positions will need to be re-staffed within the next 7 to 10 years. This is further aggravated by incidences of low enrolment in related educational programs, competition for skilled labour among industry occupations, and in some cases educational program downsizing.

Furthermore, structural features within certain industries are expected to increase labour shortages in certain geographic areas. For example, the health care sector is finding it increasingly difficult to find adequate numbers of skilled labour for rural positions, and this is expected to continue.

Interestingly, only five of the 76 respondents expect the tightness for skilled labour to actually ease over the next five years from the current situation. These respondents came from a variety of sectors including mechanical trades, veterinary medicine, auto repair, and electrical contractors. All others anticipate the situation in their industry to remain constant or to tighten.

3. Provincial Variations

The four western provinces are each uniquely affected by skilled labour shortages. Of the 76 industry associations that submitted questionnaire responses, 22 represent industries in British Columbia, 20 in Alberta, 15 in Saskatchewan and 12 in Manitoba. The remaining associations represent two or more provinces or were national associations – including two energy sector associations that are grouped with Alberta in the chart (Figure 4).

Of the 22 associations in British Columbia, only 15 perceive some (13) to severe (2) labour shortages. These results contrast to the other western provinces, which all report a higher degree of skilled labour shortages at present. This is consistent with British Columbia's generally softer economy at present, the difficulty it is experiencing in its forestry sector, and last summer's drawback of SARS on its tourism sector.

FIGURE 4: Labour Shortages by Province
(January/February 2004)

	Severe Shortage	Some Shortage	No Shortage	Excess Supply	Total
British Columbia	2	13	6	1	22
Alberta	9	9	3	1	22
Saskatchewan	6	7	2	0	15
Manitoba	5	7	0	0	12
TOTAL	22	36	11	2	71

SOURCE: Canada West Foundation 2004 Industry Association Questionnaire. Alberta includes the two energy industry associations which are technically national.

In Alberta, 18 of 22 industries indicate some (9) to severe (9) shortages. These figures include the responses from the two national oil and gas industry associations, which are added to Alberta's totals since a large majority of oil and gas drilling is done in this province.

Shortages appear to be even more substantial in Saskatchewan and Manitoba. Of the 15 Saskatchewan based respondents, 13 reported some (7) to severe (6) shortages, and in Manitoba all 12 respondents reported some (7) to severe (5) shortages – that is, not a single industry association in Manitoba reports having a sufficient labour pool from which to draw at present.

At first glance, the apparent tightness of labour supply in Saskatchewan and Manitoba seems surprising. Economic growth in these provinces recently has been fair, but certainly not robust. The reason for the tightness can be found in the high rates of labour mobility out of these provinces. Labour, particularly among the young, skilled workers, is more likely to leave Saskatchewan and Manitoba for jobs in other parts of the country. In fact, it is their high rates of inter-provincial out-migration – not simply their economic performances – that consistently gives these provinces the lowest unemployment rates in the country alongside Alberta. Also, the number of respondents from these provinces is small, particularly Manitoba. Accordingly, one must use caution in interpreting the responses from 12 industry associations as being representative of the entire provincial labour market.

Looking forward to the next five-year period, skilled labour shortages are expected to grow in each of the western provinces. In British Columbia, 20 of the 22 respondents report some to severe shortages, and all of the Alberta respondents forecast some to severe shortages, including the two oil and gas associations. Additionally, 14 of the 15 Saskatchewan respondents indicate some to severe future shortages, and all 12 Manitoba respondents expect some shortages or severe shortages (Figure 5).

FIGURE 5: Expected Labour Shortages by Province
(2005 to 2010)

	Severe Shortage	Some Shortage	No Shortage	Excess Supply	Total
British Columbia	8	12	1	1	22
Alberta	10	12	0	0	22
Saskatchewan	7	7	1	0	15
Manitoba	9	4	0	0	12
TOTAL	33	35	2	1	71

SOURCE: Canada West Foundation 2004 Industry Association Questionnaire. Alberta includes the two energy industry associations which are technically national.

What do these results indicate? While most industries in Alberta and British Columbia are not experiencing a "crisis" of skilled labour at present, perceptions of future demand indicate that labour shortages may soon pose a much greater challenge. In Saskatchewan and Manitoba, the overall situation may be worse at the moment as a higher percentage of industry associations perceive tightness, both currently and in the future.

Occupations that expect to face severe skills shortages in British Columbia include ambulance paramedics, mechanical and electrical contractors, manufacturers and exporters, and the apparel industry. Occupations forecasting severe shortages in Alberta include pharmacists, agricultural employees, oil and gas occupations and foresters. It is interesting to note that severe shortages are not forecast to occur in forestry occupations in British Columbia, but *are* forecast in Alberta. This high forestry demand in Alberta has been attributed to strong competition for skilled workers from the oil and gas sectors.

Associations for accountants, dental surgeons and insurance brokers all anticipate severe future shortages in Saskatchewan. In Manitoba, severe future shortages are predicted for IT, food processing, and physician occupations.

It should also be noted that not every industry association responded to the questionnaire in every province. For example, if a certain industry is reporting a skilled labour shortage in

2. Future Labour Shortages

Industry associations were then asked about their future balance of skilled labour expected in their field.

Anticipating future labour demand in the period 2005-10, the skills shortage situation becomes more acute. Of the 76 respondents, 73 indicate that they will be experiencing some (39) to severe (34) labour shortages; two predict no future shortage; and only one group forecasts an excess supply of labour over this period (Figure 3).

FIGURE 3: Expectations of Future Labour Market Shortages
(2005 to 2010)

	Severe Shortages	Some Shortages	No Shortages	Excess Supply	Grand Total
Business, Finance, Administration	1	3	0	0	4
Natural and Applied Sciences	1	4	0	0	5
Health	10	7	2	0	19
Social Science, Education, Gov't	0	2	0	0	2
Art, Culture, Sport	0	1	0	0	1
Sales and Services	4	2	0	0	6
Trades, Transport, Equipment Operators	8	9	0	0	17
Primary Industry	5	6	0	1	12
Processing, Manufacturing, Utilities	5	5	0	0	10
Total	34	39	2	1	76

SOURCE: Canada West Foundation 2004 Industry Association Questionnaire

This is sharply different from the 14 associations that currently indicate no skills shortage or an excess supply (Figure 2). This suggests that, over the coming years, attracting and retaining skilled labour is expected to be increasingly difficult.

Thirty-four of the association respondents anticipate severe shortages between 2005-10. This is a sizable increase from the 22 industry associations that currently report severe shortages in skilled labour. Increased shortages in the future are reported in nearly all occupational categories: nurses, doctors, paramedics, hotel workers, financial professionals, insurance agents, auto repairers, truckers, foresters, food processors and manufacturers all anticipate greater labour shortages over the next five years.

The industry association respondents offer a variety of explanations accounting for the increased shortages, the most significant of which is related to demographics. Respondents note that shortages in the future are expected due to the sizable portion of the workforce retiring in the coming few years. Indeed, one respondent reports that individuals over 50 years old currently fill one-third of the management positions in their industry, and that these positions will need to be re-staffed within the next 7 to 10 years. This is further aggravated by incidences of low enrolment in related educational programs, competition for skilled labour among industry occupations, and in some cases educational program downsizing.

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It should also be noted that not every industry association responded to the questionnaire in every province. For example, if a certain industry is reporting a skilled labour shortage in

Saskatchewan but not in Manitoba, it could simply be that no response was received from that industry association in Manitoba, and therefore no data is available to indicate a shortage in that province.

4. Post-Secondary Training

Industry associations were also asked three questions regarding the quality and availability of post-secondary training programs in their industry. These questions are as follows:

"Are there post-secondary training programs (university degree, technical college, apprenticeship program, etc.) currently offered in western Canada for training skilled labour in your industry?"

"If you answered YES [to the above question], is the number of students graduating from these programs adequate to meet the demands of your industry in the foreseeable future?" and,

"If you answered NO [to the first question], is the lack of training programs in western Canada constraining your industry's ability to attract skilled labour?"

Of the 76 respondents, 66 indicate that there are post-secondary programs in place for training skilled labour in their industry, but 41 of these respondents say that the number of students graduating from these programs is inadequate to meet future industry demand. Industry associations that report insufficient supply include those representing accountants, engineers, bio-technicians, nurses, doctors and physicians, paramedics, lab technologists, dentists, veterinarians, teachers, hotel workers, auto repair professionals, electrical contractors, construction professionals, foresters, manufacturers and exporters.

Respondents provided the following explanations as to why future labour shortages are expected to occur:

- Too few educational placements for students;
- A lack of financial resources for training programs;
- Union barriers;
- A lack of adequate training equipment;
- Low student enrolment;
- Low wages;
- A lack of provincial recognition standards; and,
- Quality of the education received was not sufficient for employment in the industry.

5. Reports of Labour Shortages From Other Groups

As the Canada West questionnaire data show, many industry associations feel that there is – and will continue to be – a shortage of skilled labour across western Canada. Other groups, including governments at the provincial and federal levels, industry associations and research organizations have done complementary work, attempting to identify whether or not there is a shortage of skilled labour, and if so, its magnitude. This section will highlight a few of the most recent and prominent reports.

a) Government Reports

All four western provinces and the federal government conduct research on the state of the labour market. Recent report findings of both the Advisory Council on Science and Technology (2000) and Human Resources Development Canada (Gingras and Roy 1998) are consistent. While the authors of the Human Resources Development Canada (HRDC) report find no evidence of an aggregate shortage of skills in the Canadian labour force, there is an "increased frequency of specific labour shortages in certain sectors and occupations in recent years." The authors further argue that the "increased incidence of shortages results from a cyclical improvement in overall labour conditions," as opposed to Canada not being able to fulfill its own workforce needs.

The report of the Advisory Council on Science and Technology agrees: "there was no evidence of a generalized shortage of technical skills immediately threatening the ability of Canadian firms to compete globally." The report did, however, find that there are skills sets that are in high demand and there are positions that take a long time to fill. Canada is thus vulnerable to "a shortage of individuals who combine management and essential skills and attributes with strong technical skills." In the rapidly changing global knowledge economy, this gap is cause for concern.

The governments of the four western provinces have also examined the issue of skills shortages. They use different methods and bases for their conclusions, but there are overlaps and similarities in their findings. Notable consistencies include identification of shortages in financial and business occupations

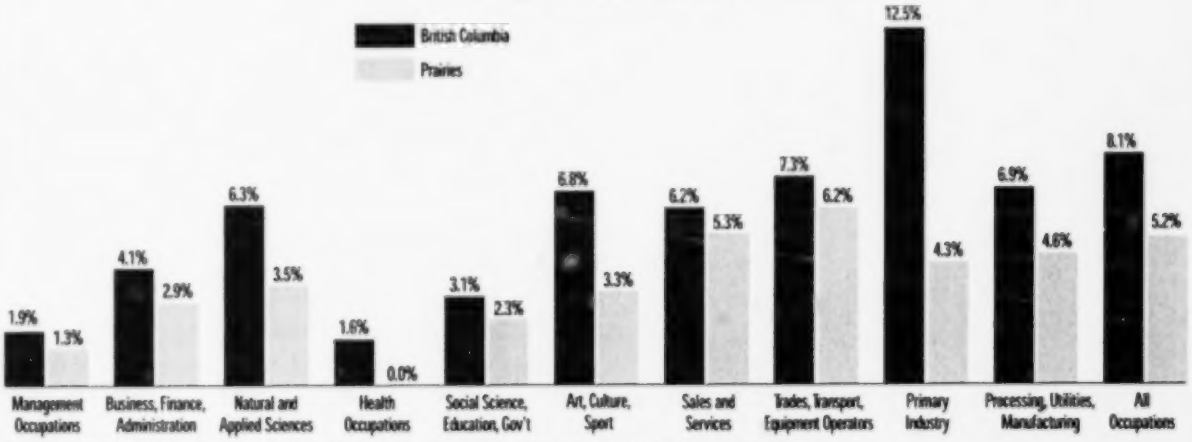
BOX 1: Industry Unemployment Rates

Low unemployment rates in particular industries – specifically if the rate falls below 3% – indicate a very tight labour market. The 2003 provincial unemployment rates by industry occupation are presented in Figure 6. For simplicity, rates for the three prairie provinces are combined using the weighted average of provincial GDP. (Note: categories with an unemployment rate of zero do not indicate that there is zero unemployment in the industry, but rather that the data are not available for a particular occupation)

Of particular interest are the trades, transport and equipment operators' category. Data from the Canada West questionnaire suggest that skilled labour shortages are severe in trades related industries (i.e., 14 of the 17 industry association responses in this category reported shortages); at first glance this claim does not seem to be supported by the unemployment data. The lowest unemployment rate in this category is 5.6% (Manitoba) and the highest is 7.3% (Saskatchewan) – both above the average unemployment rates in those provinces.

But, when the trades, transport and equipment operators category is separated into skilled and unskilled occupation categories, the data tell a different story. Occupations classified as *general labourers and helpers* post an unemployment rate between 16.0% and 13.4%, whereas the unemployment rates for *transport and equipment operators* are 5.4% to 7.7%. General construction trades unemployment rates are between 9.4% and 10.9%, and other trades unemployment rates range from 2.1% to 5.8%. This suggests that the demand for professionally trained workers is much higher than the demand for general unskilled labourers. The lower demand for the latter may be skewing the unemployment rates upward.

FIGURE 6: 2003 Unemployment Rates by Select Industry
(British Columbia and the Prairies)



SOURCE: Statistics Canada. Prairie rates are calculated as the weighted average of Alberta, Saskatchewan, and Manitoba, weighted according to GDP.

In the health related industries, only the British Columbia unemployment rate is reported (1.6%). However, Alberta Human Resources and Employment reported that in 2003 all health occupation categories in Alberta were experiencing skills shortages (AHRE 2003), and although unemployment rates are not reported for both Manitoba and Saskatchewan, these findings coincide with the questionnaire results that skilled health workers are in high demand.

In general, western Canada's highest unemployment rates are in British Columbia. In each of the occupational categories, British Columbia's unemployment rate exceeds that of the combined rate on the Prairies – the most substantial occurrence is in the primary industry occupations category. This coincides with the forestry industry association responses in British Columbia, which all reported experiencing an excess supply of labour. In aggregate, these data reinforce the findings of the Canada West Foundation's industry association questionnaire.

such as accountants and other financial officers (BC, Alberta and Manitoba); health fields including registered nurses, licensed practical nurses, and physicians (BC, Alberta, Saskatchewan and Manitoba); and engineering and technology related fields (BC, Alberta, Manitoba).

b) Industry and Other Research Organizations' Reports

Similar to Canada West's questionnaire in January 2004 but larger in scope, both the Canadian Federation of Independent Business (CFIB) and the Canadian Labour and Business Centre (CLBC) have done extensive studies to determine if there is a shortage of skills in the Canadian labour market.

CFIB conducts detailed surveys of its membership on a regular basis, and in 2000 and 2002 looked into the shortage of qualified labour and the availability of labour and training (Bruce and Dulipovici 2001, Dulipovici 2003). While they acknowledge that labour is influenced by the cyclical nature of the economy, there is evidence that at least one fifth of small- and medium-sized enterprises have experienced labour shortages even in times of high unemployment and low economic growth. As a result, they conclude that the performance of the larger overall economy is "only a partial factor in determining the severity of shortage," and markets on their own have shown an inability to deal with these shortages.

The data collected by CFIB in a survey of 22,203 business owners in 2000 show not only that concerns are broadly based and that no sector is immune, but that despite varying regional unemployment rates, labour shortages are affecting businesses across the country (Bruce and Dulipovici 2001). The national average of businesses concern over labour shortage stood at 46% (Figure 7). Alberta and Manitoba are reported to have the highest levels of concern both in the West and in the country as a whole, at 59.3% and 54.6% respectively. A follow-up survey in 2002 showed that the number of business owners concerned across the country is rising (Dulipovici 2003).

A shortage of skilled labour is not necessarily based on the availability of labour, but on the availability of *suitable* labour. CFIB found in its *Labour Pains* survey in 2002 that 64% of respondents cited a lack of candidates with the required education, experience or skills in the local area as the biggest hiring difficulty (Dulipovici 2003).

FIGURE 7: Concern Over a Shortage of Skilled Labour
(% of Business Owners That Reported Concern)

	2000 Year	2002 Year
British Columbia	35.9%	48.6%
Alberta	54.6%	58.3%
Saskatchewan	40.4%	54.6%
Manitoba	59.3%	57.8%
CANADA	46.0%	49.6%

SOURCE: Bruce and Dulipovici 2001 and Dulipovici 2003.

In September-November 2002, CFIB conducted another survey on the availability of labour and training. When asked to anticipate the difficulty that they foresaw in hiring new employees over the next three years, over half of business owners in each western province anticipated greater difficulty (Figure 8). Almost two thirds of Saskatchewan respondents expected that they would have a harder time finding skilled labour over the next three years, notably above the national average (CFIB 2002).

FIGURE 8: Ability to Hire Over the Next Three Years
(% Responding in Each Category)

	Easier to Hire	About the Same	Harder to Hire	Don't Know
British Columbia	4.6%	39.1%	51.9%	4.4%
Alberta	6.1%	32.0%	56.9%	5.1%
Saskatchewan	1.6%	31.6%	64.6%	2.2%
Manitoba	3.0%	29.3%	64.9%	2.2%
CANADA	4.2%	33.6%	57.9%	4.3%

SOURCE: Canadian Federation of Independent Business (CFIB) 2002

The Canadian Labour and Business Centre (CLBC) has also conducted surveys to ascertain the state of the labour market. Every two years, a group of managers from business, labour and the public sector is surveyed. Results from 1996 to 2002 reveal that the issue of skills shortage is not only an important issue, but that it is rising in importance for many respondents and remaining high on their list of concerns (CLBC 2002).

Managers were asked to rate the issue of skills shortages in their industry as "not a problem," "a moderate problem," or "a serious problem." Interestingly, 57% of public sector and 48% of private sector managers rated it "a serious problem." Labour leaders are also strongly concerned, with 59% in the public sector and 55% in the private sector viewing skills shortages as "a serious problem."

Also interesting to note from the CLBC surveys is an increase in those who view skills shortages as "a serious problem." Since 1996, the level of concern has jumped an average of 30 percentage points across the board, with private sector managers changing the least (+18 percentage points) and public sector labour leaders experiencing the most change (+42 percentage points). (Figure 9)

FIGURE 9: Management and Labour on Skilled Labour
(% Who Said Shortage of Skilled Labour is a "Serious Problem")

	1996 Year	2002 Year	Change Over Four Years
Private Sector Managers	30%	48%	+ 18%
Public Sector Managers	32%	57%	+ 25%
Private Sector Labour	20%	55%	+ 35%
Public Sector Labour	17%	59%	+ 42%

SOURCE: Canadian Labour and Business Centre 2002.

While these surveys ask employers and industry representatives their opinion about the state of the labour market – and this can admittedly be subjective and reflect "recruitment difficulties that are internal to the firms and not a genuine lack of people with appropriate skills in the market" (Richard, Henson and Lavoie 1996) – they are consistent and provide important data that are still significant at face value.

Several industry associations have also been concerned enough about skills shortages in their own sectors that they have produced research as well. The Petroleum Human Resources Council of Canada has identified skills shortages as one of the six key issues facing their industry. They anticipate that in western Canada's oil sands, the available amount of skilled labour will fall seriously short of the amount that is needed to maximize the industry's potential (PHRCC 2003). Over the next decade, the industry will be looking for approximately 8,600 new employees to replace retirees and to keep up with the huge growth in the sector. The current predicted direct employment level is at approximately 7,000 people. The vast majority of these new positions will be in skilled trades such as heavy equipment operators, heavy-duty mechanics and process engineers.

The Canadian Manufacturers and Exporters have also surveyed their members and found that skills shortages are of significant concern to their members as well. While they found that the shortfall had lessened this year, "companies still report significant difficulties both in finding and keeping personnel with specialized skills," particularly in engineering, management, design, marketing and machining (CME 2003). These examples of specific industries concerned with shortages of skilled labour are consistent with the results of the CFIB, CLBC and the Canada West Foundation.

6. Conclusions to Industry Questionnaire

While the Canada West Foundation questionnaire was small in scope and focused on the responses of pre-selected industry associations, the results are quite consistent with the findings of other industry and government reports with much broader scope. Based on the perceptions of industry associations, there is some evidence to suggest a growing problem with skills shortages in certain sectors and certain regions of western Canada.

Responses from 76 industry associations across the West suggest that labour shortages are currently most acute in the health care and the skilled trades occupations. This is supported by the unemployment rates for these specific industries, as well as by the findings of several government and industry reports.

Health care labour shortages are being driven by an ageing demographic, difficulties in attracting workers to remote rural areas, and in some cases by structural factors such as disparities in wages between regions/sectors. Also, the problem can be exacerbated by union regulations giving preference to workers with seniority wanting to work only part-time, making it more difficult for younger workers who need or want to work full-time.

The skilled trades – such as electricians, skilled construction workers, plumbers and pipe fitters, truckers, and heavy equipment operators – are also reported to be in tight demand. This is largely driven by Alberta's oil sands projects. However, the current tightness in these occupations is expected to worsen with the Olympic construction activity in BC, continued oil sands development, and potential projects such as the natural gas pipeline in northern Canada and hydro dam in Manitoba.

In the next five years, the expectation is for continued skills shortages in health care and the trades, as well as a growing tightness in primary industries, processing and manufacturing, and in certain sales and service sector occupations.

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The Canadian Manufacturers and Exporters have also surveyed their members and found that skills shortages are of significant concern to their members as well. While they found that the shortfall had lessened this year, "companies still report significant difficulties both in finding and keeping personnel with specialized skills," particularly in engineering, management, design, marketing and machining (CME 2003). These examples of specific industries concerned with shortages of skilled labour are consistent with the results of the CFIB, CLBC and the Canada West Foundation.

6. Conclusions to Industry Questionnaire

While the Canada West Foundation questionnaire was small in scope and focused on the responses of pre-selected industry associations, the results are quite consistent with the findings of other industry and government reports with much broader scope. Based on the perceptions of industry associations, there is some evidence to suggest a growing problem with skills shortages in certain sectors and certain regions of western Canada.

Responses from 76 industry associations across the West suggest that labour shortages are currently most acute in the health care and the skilled trades occupations. This is supported by the unemployment rates for these specific industries, as well as by the findings of several government and industry reports.

Health care labour shortages are being driven by an ageing demographic, difficulties in attracting workers to remote rural areas, and in some cases by structural factors such as disparities in wages between regions/sectors. Also, the problem can be exacerbated by union regulations giving preference to workers with seniority wanting to work only part-time, making it more difficult for younger workers who need or want to work full-time.

The skilled trades – such as electricians, skilled construction workers, plumbers and pipe fitters, truckers, and heavy equipment operators – are also reported to be in tight demand. This is largely driven by Alberta's oil sands projects. However, the current tightness in these occupations is expected to worsen with the Olympic construction activity in BC, continued oil sands development, and potential projects such as the natural gas pipeline in northern Canada and hydro dam in Manitoba.

In the next five years, the expectation is for continued skills shortages in health care and the trades, as well as a growing tightness in primary industries, processing and manufacturing, and in certain sales and service sector occupations.

BOX 2: Perceptions of Skilled Labour Shortages in the West

How do western Canadians view skilled labour shortages and the ability of the post-secondary education system to prepare students for the workforce? The Canada West Foundation's public opinion survey *Looking West 2004* polled western Canadians about public policy issues relevant to western Canadians. Among other topics, respondents were asked questions regarding the state of skilled labour in their province.

When asked to rate the importance of ensuring their province has the skilled labour it needs for the years ahead, 70.8% of westerners indicate that this is a high priority policy area, and 23.0% respond that it is a medium priority policy area (Figure 10). Demographically, individuals under the age of thirty are the least worried about skilled labour in their province, while individuals over fifty are the most worried. Clearly, these results indicate that the state of skilled labour over the coming years is a very real policy concern of western Canadians.

Respondents were also asked whether they felt graduates from their province's post-secondary system are well-prepared for the job market. According to the survey data, western Canadians are somewhat uneasy about graduates' abilities in the labour market (Figure 11). Only 24.6% of respondents indicate that graduates are well prepared for the job market, but 55.5% believe that graduates are somewhat prepared. Individuals with less than a high school diploma are the least likely to consider graduates are well-prepared for the job market (18.8%), while respondents with a graduate degree are the most likely to consider graduates are well-prepared for the job market (29.1%). In fact, respondents with any type of post-secondary graduation certificate/diploma/degree are the most optimistic about new graduates' capabilities in the job market, which may offer some insight into individuals' decisions to pursue post-secondary education.

Looking West 2004 also asked respondents if improving their province's post-secondary education system is a policy priority. According to the data, 58.6% of westerners indicate that improving the post-secondary education system is a high policy priority, and 31.3% indicate that it is a medium priority (Figure 12). These results show that, in addition to concerns over graduates' abilities in accessing the labour market, western Canadians see a need to improve the post-secondary education system.

In summary, the majority of western Canadians place a high priority on ensuring their province has the necessary skilled labour over the coming years, but have some concerns about the post-secondary system and the ability of its graduates to meet future labour needs in the West. Because of this, western Canadians are likely to be supportive of government initiatives geared towards addressing the West's future human capital needs.

FIGURE 10: Priority Placed on Ensuring Province Has Skilled Labour Needed for Years Ahead

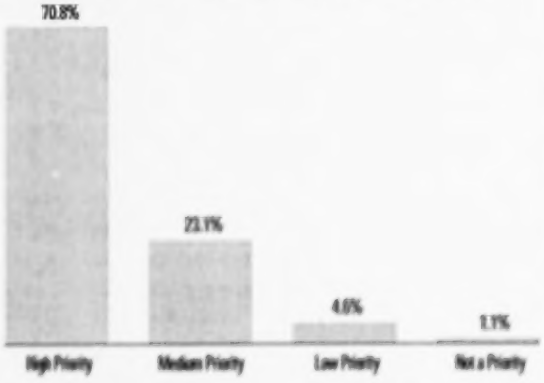


FIGURE 11: How Prepared are Post-Secondary Graduates From Province for the Job Market?

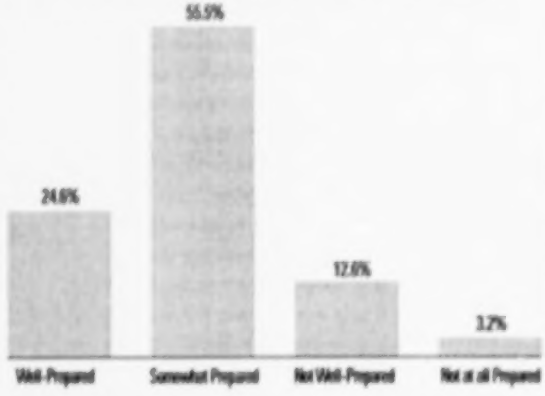
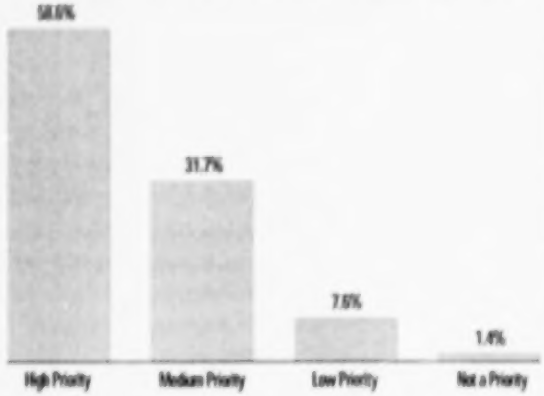


FIGURE 12: Priority Placed on Improving Province's Post-Secondary Education System



SOURCE: Bercuti, Lutsen. 2004. Looking West 2004: A Survey of Western Canadians.

In general, skills shortages are reported to be most severe in Manitoba and least severe in British Columbia. This is consistent with the high labour mobility and slow population growth in Manitoba, and the relatively slack economy in British Columbia. While Alberta arguably has the fastest growing economy, skills shortages in this province are not reported to be as severe as in Manitoba because Alberta has been a net recipient of skilled labour migration over the past several years.

The Canada West provincial data are also consistent with other industry reports, particularly the CFIB data that suggest – in western Canada – skilled labour shortage is of greatest concern in Manitoba and of least concern in British Columbia. Only Manitoba and Alberta in the West reported levels of concern greater than the national average in the CFIB survey.

Most of the industry associations indicate that there is some post-secondary education program currently provided in western Canada to train skilled workers in their sector. However, a majority of these groups report that the number of skilled workers produced by these training programs will be insufficient to meet future labour demands. (It is recognized that groups such as skilled immigrants, Aboriginal Canadians and persons with disabilities may be an important factor in solving the problem, but this topic was beyond the scope of the survey.)

Having laid out the skills shortage problem facing the West, we will turn to consider what causes labour shortages.

WHAT CAUSES A SKILLS SHORTAGE?

There are numerous factors that contribute to skills shortages. Chief among these are:

1. Cultural Biases

One factor that can contribute to skills shortages in certain industries is cultural biases. Over the past decade, many young people have gravitated towards training and potential careers in what promised to be the industry of the future – information and communications technology (ICT). Careers that didn't exist a few decades ago became the preferred goals of the best and brightest, and diverted students away from the traditional trades such as carpentry, welding, and plumbing.

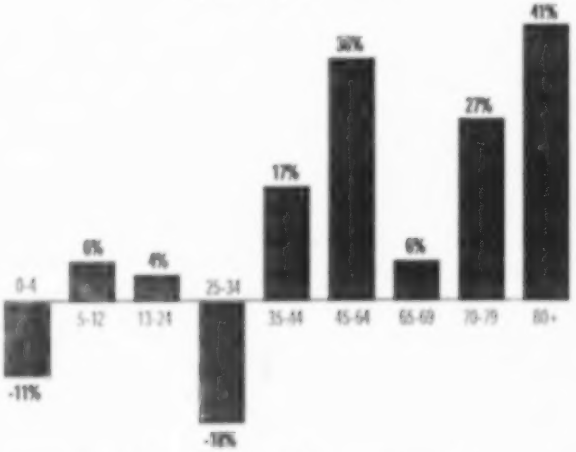
The perceptions were that jobs in the trades were manually intensive, low-paying, and unskilled – most of these perceptions having very little basis in fact. Most trades are currently relatively high paying and demand a reasonably high level of training. And many trades now use high-tech applications just as intensively as their non-trades counterparts. However, the cultural bias among young people is toward careers that are "cutting edge" rather than the tried and true. Parental expectations of their children also play a significant role in steering young students away from the traditional trades.

2. Demographic Trends

Yet another factor that adds to the skills shortage problem is demographic trends. Statistics Canada demographic data from the 2001 Census show that, by age group, older workers (age 45 to 64) grew from 5.4 million to 7.3 million since 1991 – an increase of 36% (Figure 13). This is the second largest percentage increase among the age groups, trailing only the 41% increase in the oldest group (80+ years).

Contrasting with this is the 13 to 24 year old age group, which grew from 4.4 million to 4.8 million since 1991 – an increase of only 4%. The younger working-age group between 25 and 34 years actually decreased 18% in population since 1991 as the tail end of the baby boom began moving into the mid-career population.

FIGURE 13: % Change in Canadian Population
(By Age Category, 1991-2001)



SOURCE: Derived by CWI from Statistics Canada Table #98F0030XIE2001002

BOX 3: Barriers to Inter-Provincial Labour Mobility and Differential Skill Recognition Standards

Uninhibited labour mobility is essential to ensuring a fully functional economy, and a lack of uniform skill recognition standards across provincial boundaries can lead to labour market inefficiencies such as high unemployment or overly tight labour demand.

Structurally, labour mobility complications arise from the fact that each of the provinces and territories is responsible for setting the professional standards within many of their own regulated occupations. Regulated occupations are defined as occupations that require individuals to obtain licenses to be employed as professionals in the field, and usually include specialized education and experience.

Regulated industries account for approximately 20% of the workforce, and are separated into two general categories: apprenticeship trades and regulated professions (Work Destinations Canada 2004).

Apprenticeship Trades: Provincial governments set licensing and certification requirements for apprenticeship trades programs, and select the occupations that qualify as apprenticeship trades occupations. At some points, these requirements may inhibit labour mobility by forcing professionals who are educated out-of-province to incur supplementary licensing costs or undergo (often unnecessary) skills upgrading.

Progress has been made in reducing the barriers to labour mobility in the apprenticeship trades. The Inter-Provincial Standards "Red Seal" Program provides a standardized endorsement on apprentice and journeyperson certificates, which allows qualified trades persons to practice the trade in any province or territory in Canada. Essentially, Red Seal certifications are administered by the provincial governments at apprenticeship institutions as inter-provincial standard examinations. To date, Manitoba participates in 36 Red Seal trade programs, Saskatchewan in 34, Alberta in 41 and British Columbia in 42 (HRDC 2004).

Regulated professions are monitored by self-governing industry structures that are established in accordance with provincial legislation. These structures or "associations" often have the ability to set standards within the profession by controlling the licensing or certification requirements for a particular occupation within the province. This system – although established to protect the public from improperly trained professionals – can limit labour mobility. For instance, provincial residency requirements may force relocating professionals to incur duplicate qualification and training costs, thereby limiting the ability of professionals to practice inter-provincially. As well, variations in education programs, training requirements and licensing examinations may reduce individuals' incentives to relocate.

Government and Industry Attempts to Reduce Mobility Restrictions: In addition to the Red Seal program, there have been other recent efforts to enhance inter-provincial labour mobility. The Agreement on Internal Trade, signed by the first ministers in 1994 and implemented in 1995, is mandated to reduce barriers to mobility in two ways: by limiting residency requirements as a condition of licensing/certification or as a condition of eligibility for employment, and by establishing a process for the recognition of occupational qualifications of workers (Industry Canada 2003).

For trades requiring certification in only a few jurisdictions and not covered by the Red Seal program, governments are working to ensure more consistent exam and apprenticeship requirements across Canada to reconcile occupational standards and to introduce other accommodating measures. The Canadian Council of Directors of Apprenticeship – which reports through the Forum of Labour Market Ministers (FLMM) – is responsible for implementing labour mobility in the regulated trades.

The Social Union Framework Agreement (SUFA) of 1999 – as agreed to by all jurisdictions with the exception of Quebec – committed to ensure that full compliance with Chapter 7 (labour mobility) of the Agreement on Internal Trade be achieved by July 1, 2001. At that time, collective progress had been made and 42 of the 51 regulated occupations had agreed or substantially agreed on conditions under which mobility would be facilitated (usually documented in the form of a mutual recognition agreement (MRA)). By March 31, 2004 there were 48 MRAs concluded, although not all jurisdictions had signed. Consequently, the majority of regulated workers are enjoying the benefits of new or expanded labour mobility protocols.

The FLMM continues to address outstanding challenges to full implementation of mobility agreement and to respond to technical and other changes in regulated professions and trades.

3. Cyclical Patterns

A third reason why certain sectors are experiencing skilled labour shortages has to do with cyclical patterns within the industry. For example, demand for workers in oil and gas drilling tends to be cyclical, both within the year (winter and summer being high demand peaks) as well as throughout the span of several years as drilling activity ebbs and peaks with energy prices. This causes shortages of labour that are at times tighter than others, a feature that further complicates the recruitment efforts in the industry.

4. Structural Issues

A fourth reason for skills shortages could be structural issues within an industry where the demand for skilled labour lies in certain segments or areas but not in others. For example, lifestyle factors may make it difficult for rural hospitals to recruit physicians or nurses, while there is no apparent shortage in these occupations in urban centres. Or, as another example, the demand for pharmacists in Alberta is uneven throughout the health services industry. A recent story on the Calgary Health Region suggests that the shortage of hospital pharmacists is at a critical level, and in some instances could have a serious impact on patient care in the hospital system (Calgary Herald, February 17, 2004). The root of the problem is identified as the disparity of wages between hospital pharmacists and community (i.e., retail operation) pharmacists, for whom wages in Calgary are 20-25% higher. Higher wages in other jurisdictions can also contribute to shortages, such as loss of trained health care workers to the US.

Another structural factor causing labour shortages is the limitations of labour mobility caused by inter-provincial differences in skills recognition and standards. This barrier to the free movement of labour can cause shortages by limiting the pool of qualified workers to those within the province. Not all workers are willing or able to move, but the inter-provincial barriers to labour do nothing to encourage moving or to make a potential move easier.

There has been extensive analysis of what is causing and could cause shortages in future. Recent reports point to all of the factors highlighted here: demographic issues due to our aging society; the trend towards early retirement; global competition for talent (particularly to the US); and societal influences away from certain career paths such as the skilled trades (BC 2003; Finlayson 2001; Alberta 2001).

Whatever the reason – cultural, demographic, cyclical or structural – the fact is that labour markets do not always behave as we would like them to. And just as unemployment is a problem because it under-utilizes labour, a shortage of skilled workers is a problem because it under-utilizes the entrepreneurial energy of companies.

It must be emphasized that the reported skills shortages in western Canada do not necessarily imply that it is easy to find work in these areas, even for skilled workers. Unemployment remains a real problem for millions of Canadians regardless of the tightness in certain labour markets. The findings presented in this study should in no way suggest that jobs are easy to find.

There are several reasons why the job hunt in tight labour markets can still be very difficult:

- A mismatch of skill sets with those required by the employer;
- Insufficient experience;
- Unwillingness/inability of labour to migrate to where jobs are;
- Tightness of labour market confined to certain geographic area;
- Lack of information about current job opportunities;
- Lack of available training or apprenticeship; and
- Job seekers unaware of programs and training available.

Many of these reasons have to do with the required skills, training and education that are required to find jobs in the high-demand markets.

SUMMARY AND CONCLUSIONS

A chronic shortage of skilled workers will inhibit a company's ability to grow and restrict a region's ability to create wealth. As detailed in this report, western Canada may be facing some severe labour shortages at present, and industry associations are expecting these to increase over the next five years. Perceptions of skills shortages are particularly apparent in the health care and trades sectors.

Many reasons exist for these shortages of skilled labour including cultural biases, demographic shifts, cyclical patterns, and structural and geographic factors. An ageing population, low population growth, an under-utilization of the skills of immigrants, Aboriginal Canadians and retirees, and a lack of student awareness contribute to the complex problem of labour market imbalance.

Additionally, according to respondents of the CWF questionnaire, factors such as provincial recognition standards, union barriers, and the structure of post-secondary training programs may also contribute to the state of the skilled labour market in the West.

Ultimately, chronic skills shortages will prevent companies from expanding operations, drive up labour costs, and shift operations elsewhere. Clearly, the lack of skilled labour needs to be addressed if western Canada's economy is to remain strong.

Solving the problems of skills shortages will require a coordinated approach between labour demand and labour supply. Many elements of the labour market will contribute to finding a balance: enhanced recruitment efforts by companies, improved productivity, and improved retention of existing labour to name a few. But post-secondary education and training is also a critical element in providing a stable and adequate supply of qualified workers.

Many initiatives are underway by various levels of government and industry to understand the linkages between training and employment. But, to ensure that the willing are also the able, much more needs to be done in coordinating the private sector, the governments that largely oversee post-secondary education, and the partnerships between the two in training and hiring workers. ■

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